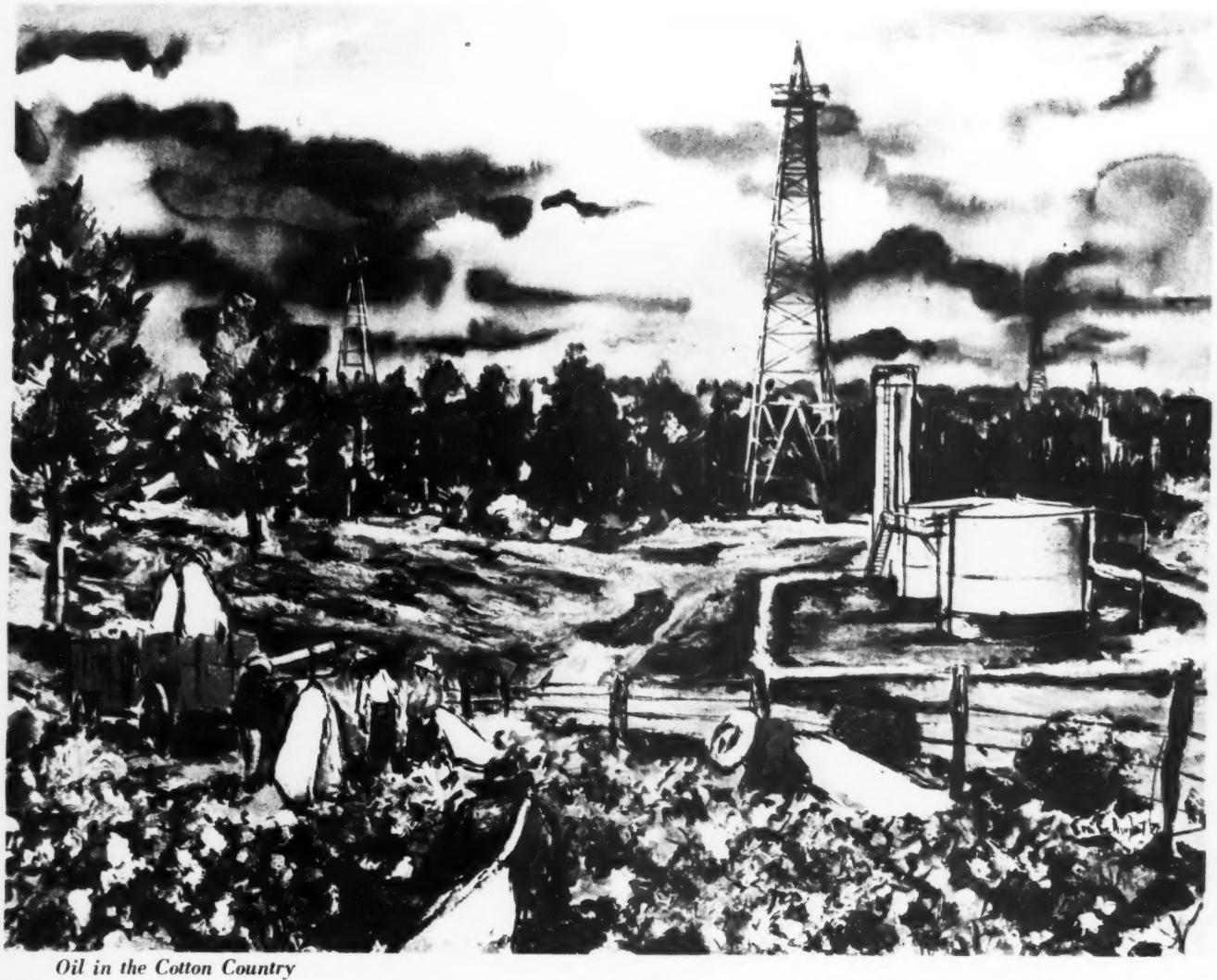


Oil in the Cotton Country

The HUMBLE WAY

JULY-AUGUST, 1946

The HUMBLE WAY

Vol. II JULY-AUGUST No. 2

PERSONNEL ADMINISTRATION AND THE EXECUTIVE

An address by Executive Vice President Hines H. Baker at the Southwest Area Conference on Industrial Relations held in Houston on May 3, 1946

There is a growing recognition and acceptance in industry of these fundamental conceptions of the functions and dealings of business organizations: First, that a business organization justifies its existence and endures only if it performs a worth-while service; second, in order to fulfill its mission and to endure, a business organization must be fair and square in its dealings with the public, with competitors, with stockholders or members if it be a partnership, and with its employees. The practice of these principles should lead to good industrial relations, and I may say, also, to good public relations. If they are practiced by the company and reciprocated by the employees, there should be no conflict between the company and its employees. Their interests become common; they have a common economic destiny; and all of their relationships become mutually helpful with understanding and confidence on both sides.

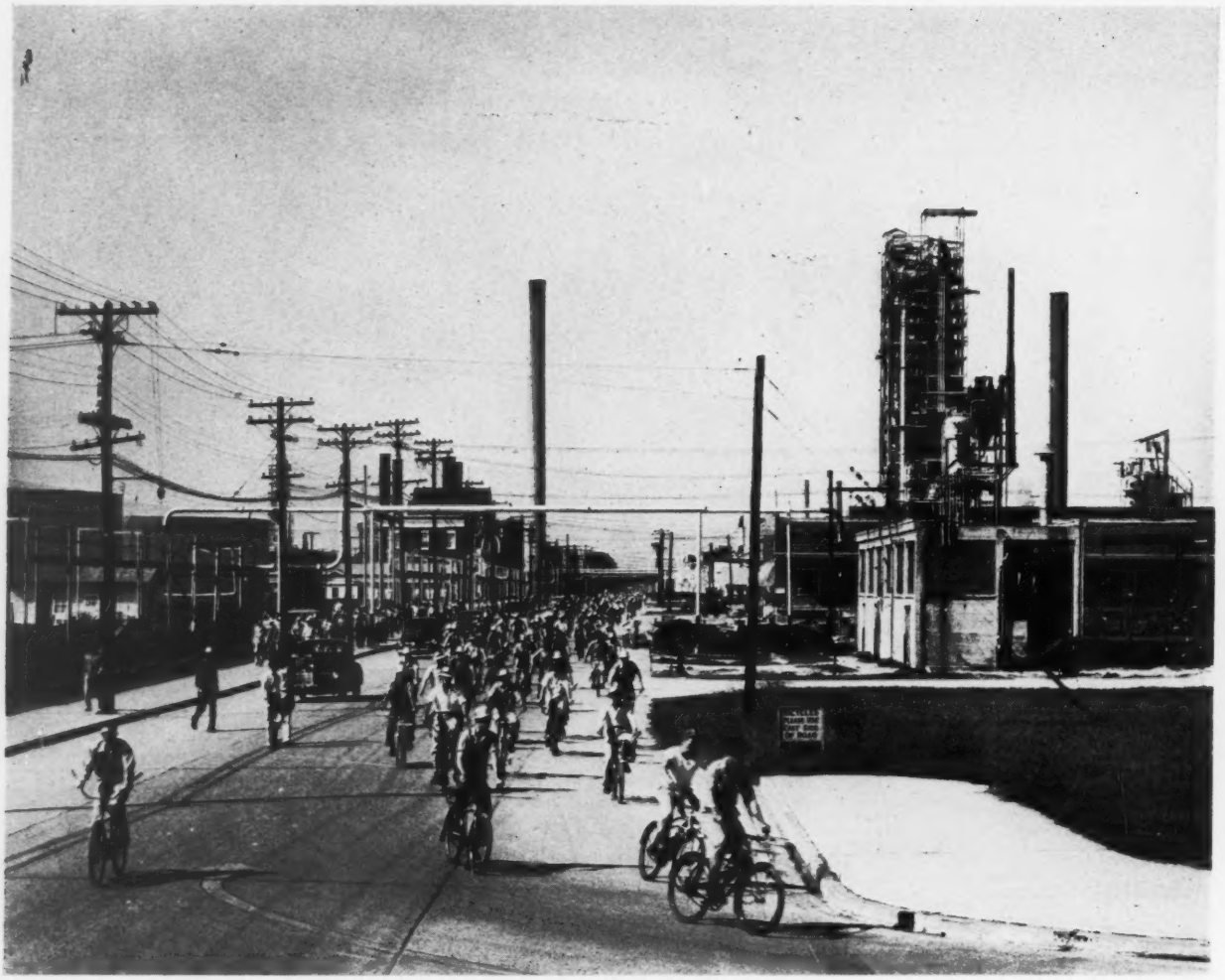
American industry, I think, has reason to be proud of its progress in the field of operations and production. We have made marvelous advances in research, technology and engineering, and in the processes by which production is carried on effectively. Our executives and management have given a great deal of attention to the details of operation, to sales and to finance, and have made American business outstanding in its achievements in those fields. There has not been given, however, the same attention to the matter of human relations as has been given to the matter of production. There has been a great deal of interest in the matter of equipment, facilities and agencies for production, and too little attention on the whole to the matter of human interests that are involved in the carrying on of our business. There is a great need in this country for emphasis upon a study and a recognition of the human elements that are involved in business and in government and in all of our relationships. It is necessary that more attention be given to human engineering if we are to have the degree of cooperation, competency, efficiency, and industry required in our business, with good morale and those elements that lead to a contented, happy relationship where teamwork between management and employees produces the best results.

The greatest asset of a business organization is not the physical plant, nor processes, nor techniques; the greatest asset is the men and women who comprise the organization. It seems to me, therefore, that the biggest job that the executives in any business organization have is the formation and maintenance of a good organization, the development, if you please, of personnel. I believe that good industrial relations are a primary responsibility of the chief executive and all the other executives of a business organization. It is a primary responsibility for success; and this responsibility cannot be sidestepped; it cannot be delegated. I care not how good an industrial relations or personnel administration organization you may have, the responsibility in the end for industrial relations rests squarely upon the management. It must be faced honestly and squarely. And that applies not only to top executives but it applies in all levels of management, from the operations manager to the plant superintendent to the foremen and to the lower supervisory groups; it applies to all management.

The responsibility for good industrial relations, therefore, can only be met by the executive in doing certain definite things. As a business grows in size, as the operations become more complex, the number of employees increases, and the variety of the work spreads, industrial relations cannot be conducted by direct personal contact on the part of the top executive; it can only come as a result of a carefully thought-out, a well-formulated plan or program. I should like to mention a few of those things that would have to be considered in the development of a well-thought-out plan for a program of industrial relations.

Management must determine whom to hire and the procedure and machinery for hiring; the proper placement of employees in the work; orientation and training; transfers of employees, promotions, demotions, and other changes on some fair basis; the rates of pay for employees and the differentials in pay as between various groups; means of finding out what the employees are thinking and what they are doing; regular supply of information to the employees on the company's affairs; procedures for prompt and fair handling of

A GANG TRUCK serves as a mobile workshop for a Production department roustabout gang laying service lines on a lease.



THE GREATEST ASSET OF A BUSINESS ORGANIZATION IS NOT THE PHYSICAL PLANT, NOR PROCESSES, NOR TECHNIQUES;

all grievances; some program of information and planning for foremen by which the information may come up from the men below to management and the decision of top management may be brought back down the line through the various levels of supervision to the working man; provisions for healthy and safe working conditions; proper working rules. They must set up the mechanism, in other words, by which the basic or fundamental policy shall be carried down to the last man.

Management must determine what is going to be done about some of the primary desires of their employees. I may mention four of these. Employees have a desire for fair treatment at the hands of management, and management must determine what it is going to do about that. They have a desire for status—status in their own eyes, in the eyes of their families, and in the eyes of the superior within the organization. They have a desire for opportunity for advancement; a desire for security—job security; an income while sick or off duty because of an accident and an income in old age.

A great number of other matters that must be thought out and worked into some correlated and more or less well-stated plan of action are necessary to any successful industrial relations program; and management must do that. Not only must there be a well-formulated, thought-out plan or policy or program, but the executives in the organization must know whether that plan is being carried out within the organization, must be informed, in other words, upon what is taking place in relation to the plan or policy.

Now, I am thinking that the executive in facing his responsibility for good industrial relations must keep primarily in mind the importance of the day-by-day relationships of the company with each individual employee and each group of employees; this matter of getting along, getting the other fellow's viewpoint, understanding and arranging in advance to meet the issues that may arise. What I am talking about is the cultivation or creation of a climate within which there may be mutual confidence and mutual respect, a recognition of a joint interest and the development of a teamwork morale within the organization, which comes, as I say, from recognition of these responsibilities in the day-by-day conduct of operations and contacts with employees.

In this day, as you know, with active organizations of unions and bargaining agencies as representatives of employees, the executive must also take that into account. He must inform himself upon the history of the labor organiza-

THE GREATEST ASSET IS THE THOUSANDS OF LOYAL, CONTENTED MEN AND WOMEN WHO COMPRISE THE ORGANIZATION

tion movement, its aims and purposes, and the techniques that are employed. He must know how to negotiate contracts and how to see that they are carried out in the spirit in which they are made, and otherwise be prepared to deal with these organizations on an up-and-open basis. But I would like to emphasize that to my mind, important as that is, it is secondary to the more fundamental and basic matter of an attitude of mind and heart that expresses itself day-by-day in the studied and carefully prepared plans and programs for making effective a situation within which there may be a spirit of harmony and understanding and cooperation among all who are involved.

The executive must also be alert to learn from the staff organization created for the purpose of bringing to bear upon these problems research, analysis, and information as to the experience of others in the field; must learn to utilize those agencies effectively. But above all, it seems to me that the executive must see to it that the company lives right day-by-day over a long period of time so as to create within the minds of the employees and all others with whom the company deals that sense of respect and confidence and reliance upon the integrity of the organization in its relationships with the employees.

Now, to summarize briefly what I have said, I would like to make three definite points. First, employee relations are fundamentally and basically the result of the way the company lives. If it is motivated by a desire to render a worthwhile service and seeks to treat all with whom it deals, including the employees, in a fair way, the company has laid the fundamental basis for good industrial relations. Second, if the company is to continue to live this character of life and to practice good employee relations it must have a carefully thought-out and well-formulated policy, plan, or program, with the necessary and appropriate mechanisms for carrying that plan, policy, or program into effect. Third, employee relations are the responsibility of management. Management cannot sidestep this responsibility. It cannot delegate it. Management must meet the responsibility. Now, if it is wise, it will create agencies and staffs competent to carry on research and to advise and counsel with it upon all the many problems that develop; but management will not attempt to delegate to those staff organizations the primary responsibility which must rest upon management. And any company is fortunate, indeed, if the executives of that company recognize this responsibility and not only recognize the responsibility but take it and pursue it as a grand opportunity.

OCTANE NUMBER, *Please*

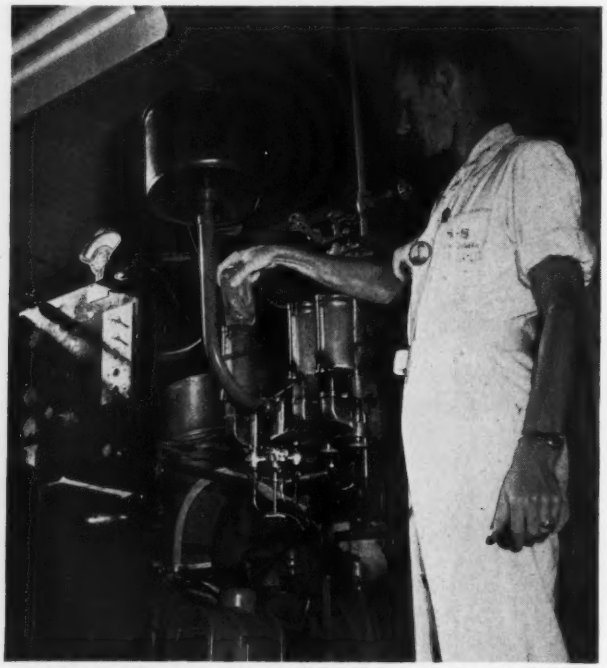
KNOCK TESTING engines are equipped for specific jobs. This one determines octane ratings of supercharged aviation gasolines.

Chugging away 24 hours a day at Baytown refinery is a group of gasoline engines trained in the school of hard knocks. In fact, knocking is their business, for these are test engines at the Knock Testing Laboratory. Huddled side by side in a sort of misery-loves-company arrangement, they take a terrific beating as they yield up octane numbers of unknown fuels sent in for daily testing from refinery units.

Briefly, the testing procedure is as follows:

First, a fuel sample of unknown octane number is burned in one of the engines. Compression ratio, fuel-air mixture, and other engine settings are adjusted until the point of maximum knock intensity is reached, and that point is marked. Then, two blends of reference fuels with known octane ratings are run under the same engine conditions. One reference fuel has a higher octane number than the unknown fuel; the other has a lower octane number. When points of maximum knock intensity have been established for these two reference blends, the octane number of the unknown sample is determined by interpolation, or bracketing, between the high and low octane blends.

Ever since automobiles were produced with a compression ratio high enough to cause an audible knock, the automotive and petroleum industries have worked to eliminate the trouble. Although the problem has been attacked from other angles, improvement of gasoline quality has been found to be the best way to cure fuel knock in automobiles. Back in the early 20's, the discovery of tetraethyl lead ended the search for a "magic potion" which would increase the antiknock quality of gasoline, and modern refining processes have improved base stocks and components. Gasolines can now be tailored to fit engines and operating conditions.



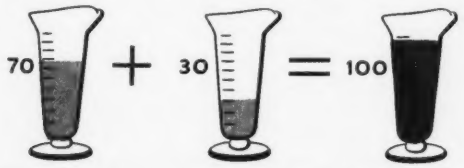
OCTANE NUMBERS of unknown fuels (above) are found by bracketing these fuels between carefully prepared reference blends (left).

ALL THE MECHANICAL WIZARDRY OF A KNOCK TESTING ENGINE DEPENDS UPON GUIDANCE OF THE MAN AT THE MACHINE

OCTANE NUMBERS: What they are, where they come from

Octane numbers are measurements of anti-knock quality in gasolines, just as miles are measurements of distance. They are based on mixtures of two pure hydrocarbons, *iso-octane* and *normal heptane*. Iso-octane, from which the word "octane" comes, has an octane number of 100 and is very high in anti-knock quality. Normal heptane has an octane number of zero, and knocks very readily.

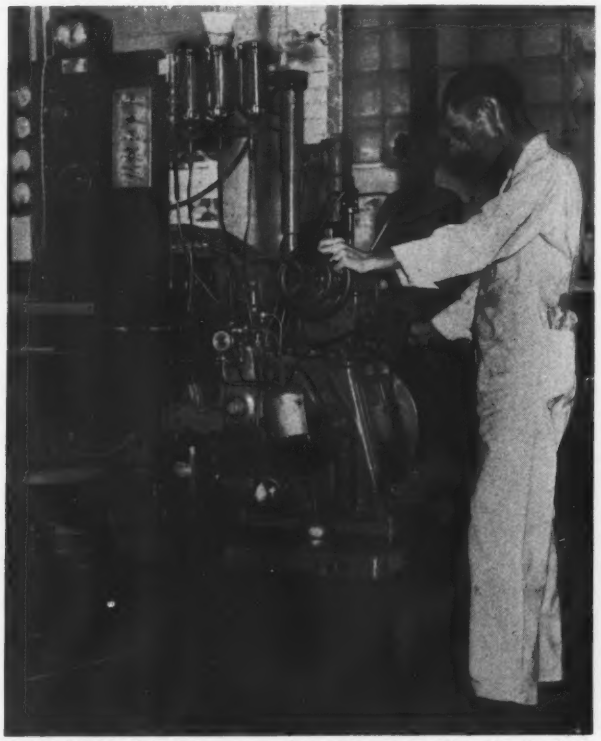
The two pure hydrocarbons may be mixed together in any proportion, and the octane number of the mixture is decided by the relative amount of iso-octane it contains.



70 parts Iso-octane Octane Number: 100 | 30 parts Normal Heptane Octane Number: 0 | 100 parts Reference Fuel Octane Number: 70

These mixtures of iso-octane and normal heptane are known as reference fuels and are burned in test engines to determine the octane number of an unknown gasoline. When a sample of unknown gasoline "knocks" in a test engine at the same point as a known blend of reference fuel, it is assigned the same octane number as the blend.

In actual practice, both iso-octane and normal heptane are far too expensive for everyday testing, so secondary reference fuels have been developed to serve the same purpose.



INDICATIVE OF the scope and significance of the Knock Testing Laboratory's work is this engine which rates Diesel fuels.

Oil in the land o' Cotton

MISSISSIPPI, whose principal industries up to about 1940 were agriculture, lumbering, and fishing and whose chief source of income was cotton, today is writing the opening paragraphs in a new chapter of its history. From the rich alluvial delta on the west, across the bluff and red hills of the central part of the state, down to the pine-covered Coastal plains, Mississippi is throbbing with new life, new energy, new ambitions.

The rejuvenating fluid which courses through the state's arteries and which is helping toward that goal of greater well-being for all Mississippi is oil—oil in such quantity as to rank the state tenth in the nation in potential production.

Oil came to Mississippi in 1939. It came in August of that year, and the news that the No. 1 well on the G. C. Woodruff farm in Yazoo County had been brought in as a commercial producer caused the usual amount of excitement in an area where oil is new. As might be expected, the discovery started a flurry. Leasing, prospecting and drilling expanded rapidly, and today, seven years later, there are 25 producing oil fields in the central, northern and southern portions of the state.

Daily production in the Magnolia state does not yet approach the figures of such oil-rich states as Texas, Oklahoma, and Louisiana, but it is significant to note that the American Petroleum Institute's summary as of January 1, 1946, shows Mississippi credited with proved reserves of 267 million barrels and ranking tenth among the states in potential production.

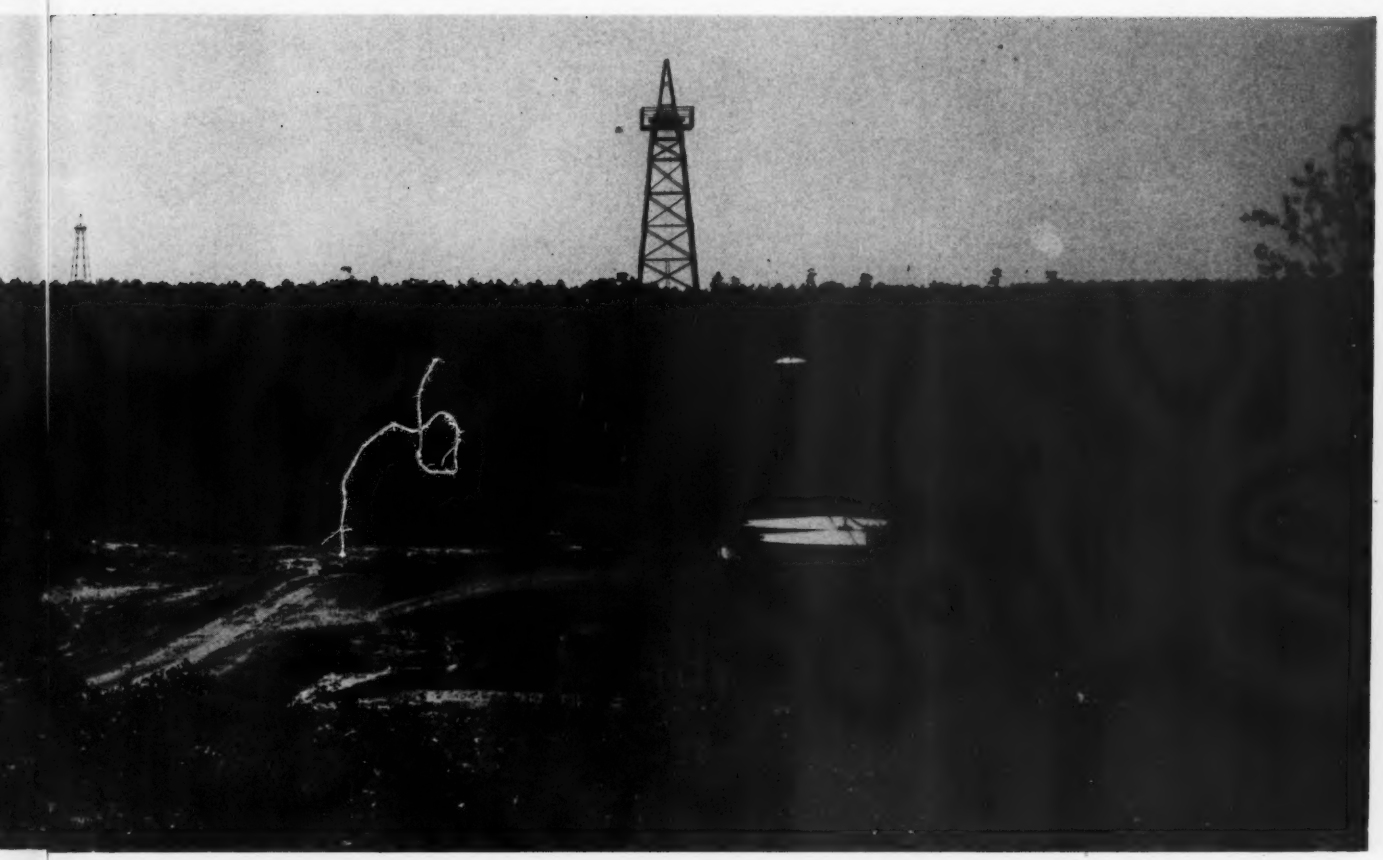
Quite naturally, this rapid rise of Mississippi's star on the oil horizon has been felt across the length and breadth of the state. Major oil companies have established district offices and have sent experienced oil people into many areas; independent operators and newly formed companies have set up headquarters; oil field supply stores have been opened in many localities; and the numerous commercial enterprises accompanying the development of oil resources have grown apace. Oil people are no longer a novelty in Mississippi. On the sidewalks of Natchez, Pickens, Columbia, and Heidelberg; of Yazoo City, Laurel, Waynesboro, and other communities the khaki clad employees of oil companies and supply houses mingle with the local citizenry in a friendly atmosphere. The communities have spread the "Welcome" mat, and the oil folks have responded with, "Thank you. We like it here."

Significant as the growing industry's position in the state is today, no true picture of it can be presented without harking back to the very earliest days of the search for oil and gas in the area. Here is a chapter that is at once as interesting, as fraught with disappointments, and as filled with examples of tenacious determination as is common to most states in which oil has been discovered.

Geologic information which pointed to possible oil and gas formations in Mississippi was being advanced about the time Colonel Drake drilled the first successful oil well in Pennsylvania in 1859. In that same year Dr. Eugene W. Hilgard, state geologist, is credited with having determined and described the state's first recognized uplift, the Jackson Dome. This determination, plus the advancement soon thereafter of the anticlinal theory of gas and oil accumulation, was not enough, however, to arouse any appreciable interest in the area. Most histories of Mississippi's petroleum resource development record the first well as having been drilled in 1903. However, state geologist William C. Morse of the University of Mississippi in a recent paper reveals that the first well was drilled at Bay St. Louis in 1901, the same year in which the Lucas gusher at Spindletop put Texas in the oil limelight.

After this first well was abandoned as a dry hole, sporadic drilling continued through the years. In fact, something in the neighborhood of 500 wells were drilled, but no concentrated activity was noted and no consequential discovery was made until the comparatively small Amory gas field was found in the fall of 1926. Subsequent discovery of the Jackson gas field on the outskirts of the state capital on February 28, 1930, revived interest in Mississippi's potentialities because here was a discovery of real commercial significance—a field which has produced many billions of cubic feet of gas and is still producing.

What may be called the modern era of Mississippi's development of petroleum resources began on August 29, 1939,



PRODUCING WELLS AND STORAGE TANKS STAND UNOBTRUSIVELY ON THE WOODED HILLSIDES IN THE EUCUTTA FIELD

when the first well was completed in what is today the state's largest field, the Tinsley pool. Systematic exploration work was in progress in several sections of the state at the time, but it was this commercial discovery which spurred a rapid and widespread expansion, first in the search for favorable oil strata and then in actual drilling operations. While the Tinsley field was rapidly expanded to a point where it reached the million-barrel-a-month class, enthusiasm waned considerably as wildcat wells in several other areas failed to reach oil sand. The only reward for widespread drilling in 1940 was the Pickens field; the following year saw the addition of the Carey field; and in 1942 not a single discovery was made. What appeared like a boom development with the Tinsley discovery soon was followed by a cooling of interest.

It was not until 1943 that new life and impetus were given to development with the discovery of the Brookhaven, Eucutta, Flora, and Cranfield pools in that year. The upward trend continued through 1944 and 1945 and was rewarded with the discovery of 15 additional fields in the two years. During the first seven months of this year two new pools have been added to the list.

Of the six new fields opened in 1945, Humble drilled the discovery well in two—the Hub field in Marion County and the Fayette field in Jefferson County. Although Humble had production in several fields prior to that time, it was these discovery wells and subsequent development of the fields opened by these wells that helped expand the Company's operations to the place of real significance it now occupies in the Magnolia state. Today, Humble has district operations offices at Natchez, Hub, and Eucutta. Of the state's daily production on July 1 of 63,000 barrels, Humble was producing 1,900 barrels. Humble had three Company and two contract drilling rigs in operation in the state and 26 producing wells.

Since Mississippi's entry into the ranks of oil producing states is so recent, it is difficult to weave into the warp and woof of life there the full impact of this new industrial effort without first looking into some of the historical and social background of the state and of the people who live there.

It must be remembered that Mississippi's history is compounded of many ingredients—the rival ambitions of foreign nations who sought to rule and develop the territory; the courageous deeds and lives of visionary men who settled there and who lived and fought for freedom on her soil; the cotton and river-commerce economy which developed and flourished on the banks of the Mississippi and in its rich delta.

Within less than 50 years after the discovery of America, Mississippi had been partly explored by Hernando de Soto, and by 1541 his expedition had found the Mississippi River. Ill treatment of the Indians soon forced upon the Spanish virtual abandonment of their meager hold on the area. It was about 130 years later that Marquette and Joliet made their famous voyage down the Mississippi, and it was not long thereafter that Sieur de la Salle sought to set up in the name of France a series of fur trading posts on the river. La Salle's death in 1686 temporarily halted French efforts

IMPROVED AGRICULTURAL methods, greater use of machines, and more scientific crop rotation are encouraged by farm leaders.

in the new land, but in 1699 two brothers, Pierre le Moyne. Sieur d'Iberville and Jean Baptiste le Moyne, Sieur d'Bienville established the first permanent settlement on the Bay of Biloxi and namd it Fort Maurepas. Seeking a great river to connect the colony to the interior, the French moved this settlement first to Mobile Bay and later to the present town of Mobile. In the interest of developing the fur trade, Bienville established New Orleans, Baton Rouge, and Natchez (Fort Rosalie) on the Mississippi river. In spite of this progress, French efforts were frustrated when France, Spain, and England became involved in a dispute for the possession of the mouth of the Mississippi River. France, too, had found that mistreatment of the Indians was hindering her efforts, and so by 1763 the territory had fallen into the hands of the British. For the brief period of the latter's domination (until 1779), the area had begun to turn to agriculture, and when the Spanish recognized America's independence in that year and once again laid claim to the territory they built ahead on the agricultural foundation laid by the British.

Agriculture truly was beginning to flourish when the province came under the control of the United States in 1798. Cotton was being grown successfully on the rich land, and the invention of the cotton gin about that time cast the die for Mississippi; it was destined to be tied inseparably to cotton for many years.

All through the early years of development under American rule, trouble with the Indians was continuous. It was not until General Andrew Jackson thoroughly defeated them at the Battle of Tallapoosa River on March 27, 1814, that a measure of peaceful progress could be enjoyed. The area thus freed included all of the present states of Alabama

GLEAMING SEPARATORS and storage tanks are becoming more commonplace as more fields are discovered and production mounts.

and Mississippi. Early in 1817 the Congress of the United States divided the area in half, authorized the western half to set up its own government, and on December 10 of the same year recognized the progress of that half by formally admitting the state of Mississippi to the Union.

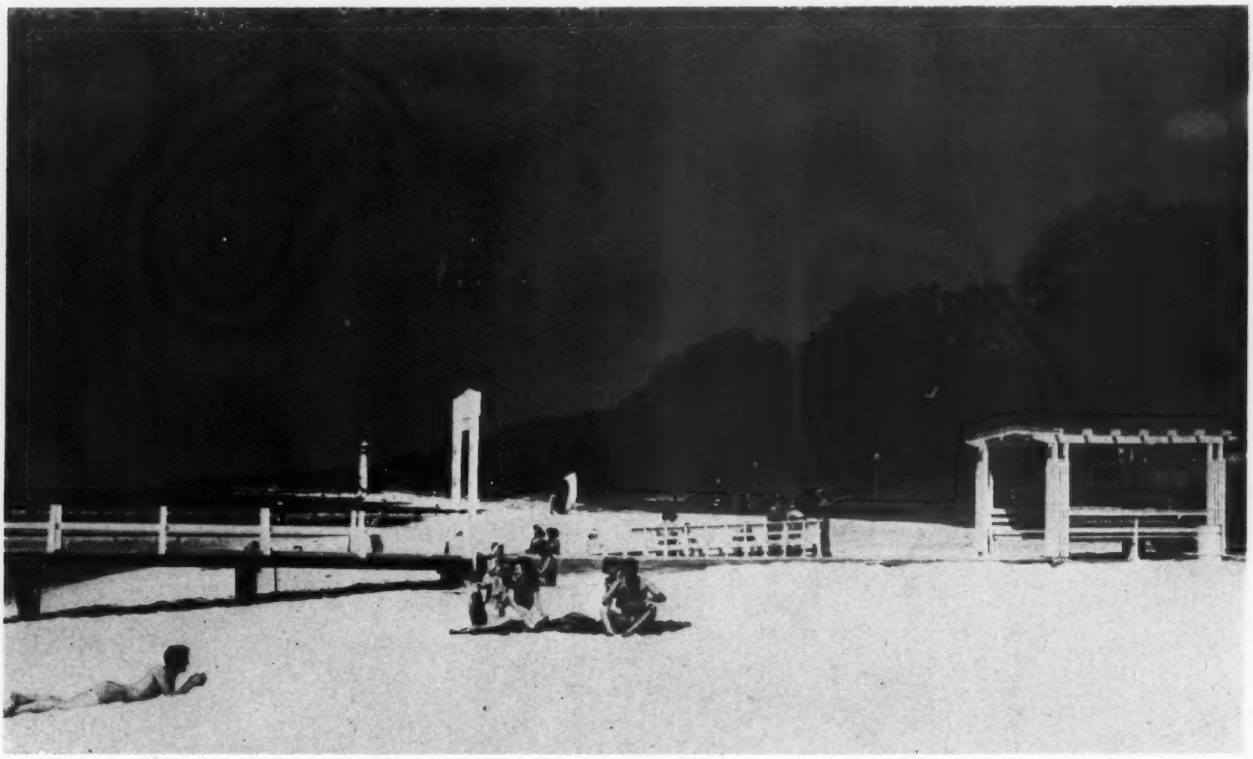
At the time, as it was destined to be for many long years, the economy of the state was primarily agricultural and revolved almost entirely around cotton growing and trade on the river. Peace with the Indians was followed by large grants in the western part of the state, opening many more thousands of acres of fertile delta land to the cultivation of cotton. Here the great cotton plantations sprang up; here too, was born that aristocratic society which brought fame to the Old South and which today remains alive in spirit in the lordly old mansions which dot the towns and the countryside of that area. Natchez, for instance, became one of America's wealthiest cities; for many years it was the hub of social and economic life in the South.

Amid this growing prosperity, many Mississippians continued to feel the restlessness, the yearning to move into new territory which pushed America's frontiers westward rapidly. Colonization was in progress in Texas, and many were the Mississippi families who came to the Lone Star state. Too, stalwart Mississippians shouldered their rifles and buckled on their swords and marched with the early Texans in their fight for independence. Doubtless, many descendants of those Mississippi pioneers who settled in Texas are today included in that large group of experienced Texas oil people, which is playing an important role in the development of Mississippi's oil reserves.

But back to that period of growth and development which came with Mississippi's statehood. For four decades every-

NODDING PUMPJACKS bring to the surface the mineral wealth which is contributing so much to the state's development program.

INVITING SANDY BEACHES make Mississippi's Gulf Coast one of the South's foremost vacation and winter playground areas.



thing pointed upward. Mississippi's population increased rapidly; agriculture flourished. Then came the War Between the States, with some of the most bitter fighting destined to take place on Mississippi soil. A number of important battles still stir the imagination today, but the siege of Vicksburg was easily the outstanding and most significant. When that stronghold fell on July 4, 1863, the fate of the Confederacy was sealed and major fighting came to an end in the state.

At the close of the strife, Mississippi, like all southern states, was bankrupt. In their struggle and their determination to regain a solid economic footing in the midst of political confusion, the people of Mississippi logically turned once again to cotton. Slavery had been abolished, but cotton looked like the safest avenue toward recovery. To this day it is the state's leading agricultural crop and its primary income producer.

It must be said, however, that greater effort has been put forth in the past two decades than ever before to supplement the state's cotton controlled economy with a strong program of industrial development and agricultural development in other fields. Mississippi's road away from a one-crop economy has been hard and long, and one important step has been the construction of a superb highway system to facilitate commerce, and business, and education.

A definite program for improved agriculture, with better crop rotation, better livestock and poultry, more modern dairying and trucking methods, is being sponsored. Boys' and girls' organizations are encouraged and helped; short-course educational plans are being conducted; state-financed research findings are placed at the disposal of farm people everywhere.

Soil conservation and soil re-building are major points in this program. In fact, leaders with an abiding interest in the state's resources are looking ahead in every field of endeavor. Their belief that a stable, long enduring oil and gas industry will provide long-range employment, greater industrial development, and benefits for schools and other institutions is prompting considerable thinking and planning in the field of regulatory legislation design to conserve reservoir energy in the state's oil and gas fields to the end that maximum ultimate recovery may be realized.

On the industrial side of the ledger the program is producing highly satisfactory results. Backed by a state financed program of publicity and advertising to attract national attention on the state's industrial and commercial opportunities, counties and municipalities may vote bonds and provide for the erection of industrial plants within their limits. These plants are offered as inducements to manufacturing concerns to locate in the areas and utilize locally produced raw materials for the manufacture of goods. Since 1944, certificates have been issued for the erection of 41 such plants. Total investment approximates $4,000,000, and problable employment of these plants is about 9,000 people. Garments, gloves, hosiery, glass products, tires—these are some of the principal products flowing from these new industrial enterprises into the channels of trade and commerce.

While all of this activity would appear to indicate a sudden spurt of agricultural and industrial activity, Mississippi's progress has not taken on any of the aspects of "boom" development. Instead, the state has witnessed the gradual fruition of a well organized plan of self-improvement; the nation has been made conscious of the fact that Mississippi is bestirring itself; and the people of the state have realized the wisdom of planning and have contributed their share in making the program successful.

And right in the midst of this forward surge, oil has come to play its vital role. With only a short seven-year opportunity to share in Mississippi's march toward a higher goal, the oil industry's rapid but stable expansion has had a considerable impact on the state's economy. With an annual production in excess of 20 million barrels and a cumulative production exceeding 100 million barrels, it is evident that almost every phase of life and work in the state has in some way felt the industry's presence.

U. S. HIGHWAY 90 ALONG THE COAST IS A GOOD EXAMPLE OF THE MODERN HIGHWAYS BUILT IN RECENT YEARS

QUEEN CERES XV AND ENTOURAGE, FOLLOWED BY THE KING, LEAVE THE THRONE ROOM AFTER CORONATION CEREMONY

YOAKUM TOM-TOM

THE SKY was clear, and the days were fair in Yoakum on June 13, 14 and 15.

That was what the Chamber of Commerce and the town fathers and the people had hoped for; that was what encouraged a record crowd of more than 30,000 people to come to that thriving Texas community to join with the local folks in the celebration of their 16th annual (Victory) Tomato Tom-Tom and Yoakum's 60th anniversary.

Tomatoes were not especially in evidence, either in the grocery store windows or at the packing sheds down by the railroad tracks. But they had been; Yoakum had just closed the richest tomato harvest in the community's history. That, coupled with the anniversary of the town's founding, was ample cause for staging the most colorful festival in Yoakum's 60 years.

Although preparations had been under way for many weeks, the real activity began on the morning of June 13. Much of the day was devoted to completing final arrangements. Civic-minded business men were helping with the downtown decorations; in the high school gymnasium similar activity occupied a small army of workers; in a three-block area just off main street, hundreds of soldiers swarmed about big trailers, making ready the Army's instructive traveling show; and out at the rodeo arena, cowboys sat around swapping yarns while others unloaded steers, calves, and horses for the rodeo.

That night at 8 o'clock the first formal portion of the three-day program was held in the high school gymnasium—the brilliantly staged "Court of United Nations" senior coronation. Regal court costuming gave an air of solemnity to the ceremony in which Miss Mary Katherine Welhausen was crowned Queen Ceres XV and Jimmie Junetka was crowned King.

The theme of pageant was World Peace. Duchesses from more than 50 neighboring towns, dressed in the costumes of the nations they represented, walked in the glare of spotlights down a raised walkway from the rear of the auditorium to the stage. Here they were met by dukes, war veterans in military uniforms, and were escorted to their places in the throne room. With the colors of the United Nations as a backdrop and the appropriately costumed duchesses banking the throne, the pageant came to a climax as the crown was placed on Miss Welhausen's head.

At the close of this ceremony, the Queen's Ball was held at Oaks Court.

Friday was Wainwright Day—in honor of General Jonathan Wainwright who led the grand parade through the streets at 11 o'clock in Herman Goering's captured automobile and then mounted the official platform to review some 60 impressive floats. While a helicopter seemed to hang in mid-air and Army airplanes zoomed overhead, thousands of spectators packed the sidewalks and overflowed into the streets.

Celebrants turned to other festive fare at the close of the parade: to the baseball game, rodeo, carnival, and to Army show exhibits.

Friday night the junior coronation ceremony at the high school gymnasium rivaled the senior coronation of the night before for brilliance in costuming. One hundred and twenty children shared in the spectacle during which Sandra Josephine Steen was crowned Queen and Craig Machac was crowned King of the Court of Castille. Another capacity audience cheered the efforts of the carefully trained children as they staged a show of two hours duration.

While this ceremony was in progress, General Wainwright was out at the rodeo arena receiving from Her Majesty Queen Ceres XV a hand carved, highly decorated saddle and a rancher's gray hat, gifts of the people of Yoakum. After expressing his gratitude, General Wainwright returned to his box seat to watch with interest the exciting events of a well-staged rodeo.

CALF ROPING was one of the featured events of the action packed matinee and evening rodeo

All through the early night hours thousands of visitors continued to stream through the Army exhibit, showing keen interest in aircraft engines, radar equipment, bomb sights, guns, captured enemy equipment, and numerous other units on display.

Saturday's program began early with Memorial Services for World War II dead, held in the high school stadium at 7 o'clock. Major Alex Von Schlichten, Chaplain Section, conducted the services, and singing was by two Yoakum choirs.

A street parade at 10:30 by the Second Armored "Hell on Wheels" division attracted another sizeable crowd, which at the close of the parade moved out to the Tom-Tom grounds for a big barbecue dinner honoring ex-service men and women.

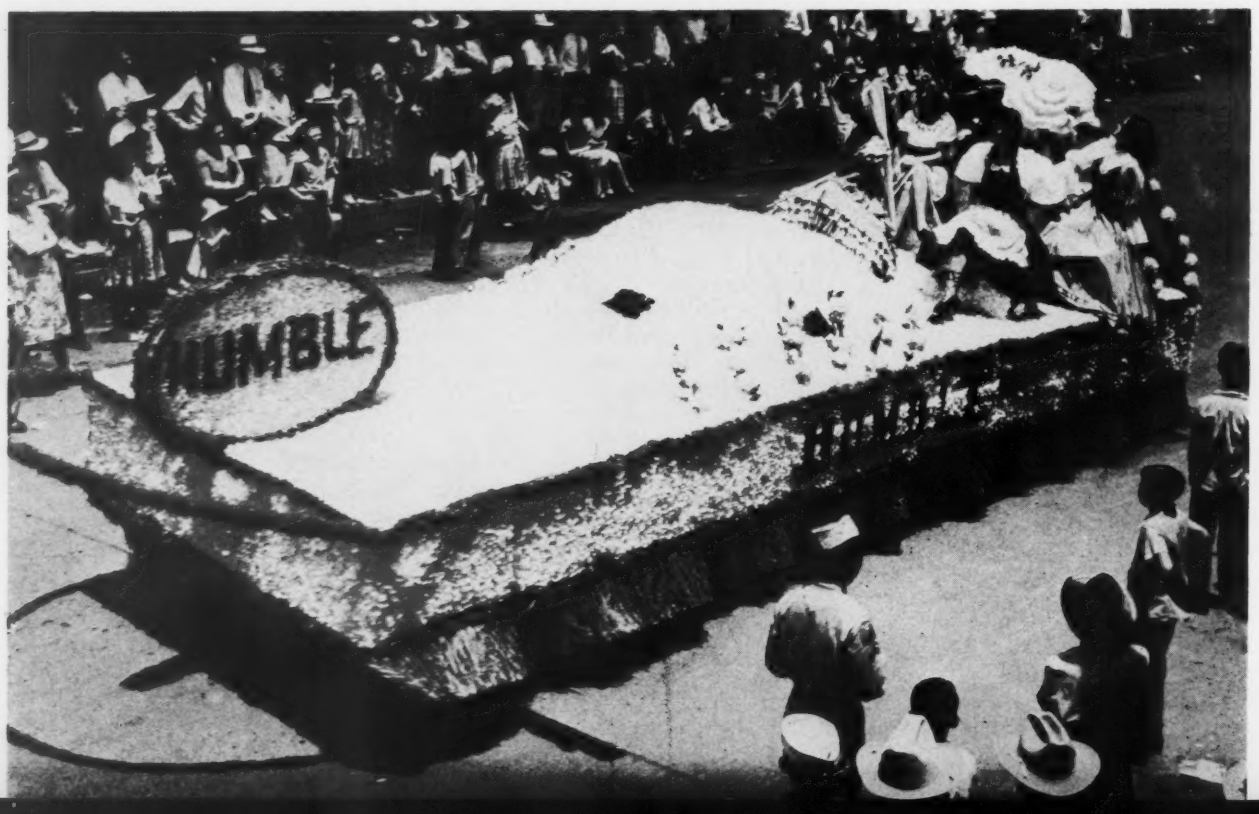
The afternoon baseball game between Yoakum and LaGrange was followed by one of the highlights of the Tom-Tom celebration, the Kiddie's Parade. Several of the floats which appeared in Friday's major parade were seen again, and a number of unique and highly interesting exhibits prepared especially by and for the children received the acclaim of the crowd.

To bring the festivities to a close on a note of gaiety a big street dance was held on Saturday night, and a brilliant aerial fireworks display over the city added the carnival touch for an appropriate finale.

Merchants were tired by Saturday night; committee chairmen and their associates seemed to be grateful that the end was near. All could go home satisfied and gratified. No greater throngs had even been brought to Yoakum; no more colorful and impressive parade and festival had even been staged in the community.

It had been a fitting festival to commemorate the close of an abundant tomato season.

HUMBLE SALES DEPARTMENT FLOAT WAS ONE OF SIXTY WHICH MADE UP THE COLORFUL PARADE ON WAINWRIGHT DAY



Much of the color and gaiety of the Yoakum Tom-Tom celebration are portrayed in these pictures selected from a series depicting many other events on a full three-day program.

At right, brightly costumed duchesses from nearby towns rode colorful floats in the parade.

Below, General Johnathan Wainwright watched rodeo events after receiving a saddle and a rancher's gray hat from the people of Yoakum.

Colorful floats in the Kiddie Parade attracted a large crowd.

Court of Castille prior to the colorful junior coronation.

Many visitors had their weight guessed at the carnival.

Checked BY AIR

Make way for the aerial patrol!

Another of the colorful figures of the oil industry, the pipe line walker, has given way to modern science. The thousands of miles of line which he and his fellow walkers patrolled on foot, on horseback, or in a stripped down car, are now being covered quickly, efficiently, and more often by pilot-inspectors in light airplanes.

Flying pipe lines is not brand new to the oil industry, nor to Humble Pipe Line Company, but it was only recently that Humble completed arrangements to fly its entire main line system. It all began as an experimental venture about 18 months ago when a contract was signed with a retired Pipe Line Company employee to patrol the Southwest Texas division lines by plane. When the experiment proved highly successful, plans were made to handle the entire system by air. Four light planes were ordered and pilots were engaged who were both expert fliers and experienced pipe line operations men.

The Southwest Texas division is still being flown on contract basis; the other four divisions are patrolled in Pipe Line ships by Company pilot-inspectors. Between the five planes, some 3600 miles of main line right-of-way are flown at least once a week. Pilot-inspectors fly a little to the side of the right-of-way, look out of the windows of their ships from levels between 100 and 500 feet, and watch for tell-tale oil spots indicating leaks and for other irregularities that may require the attention of repair crews.

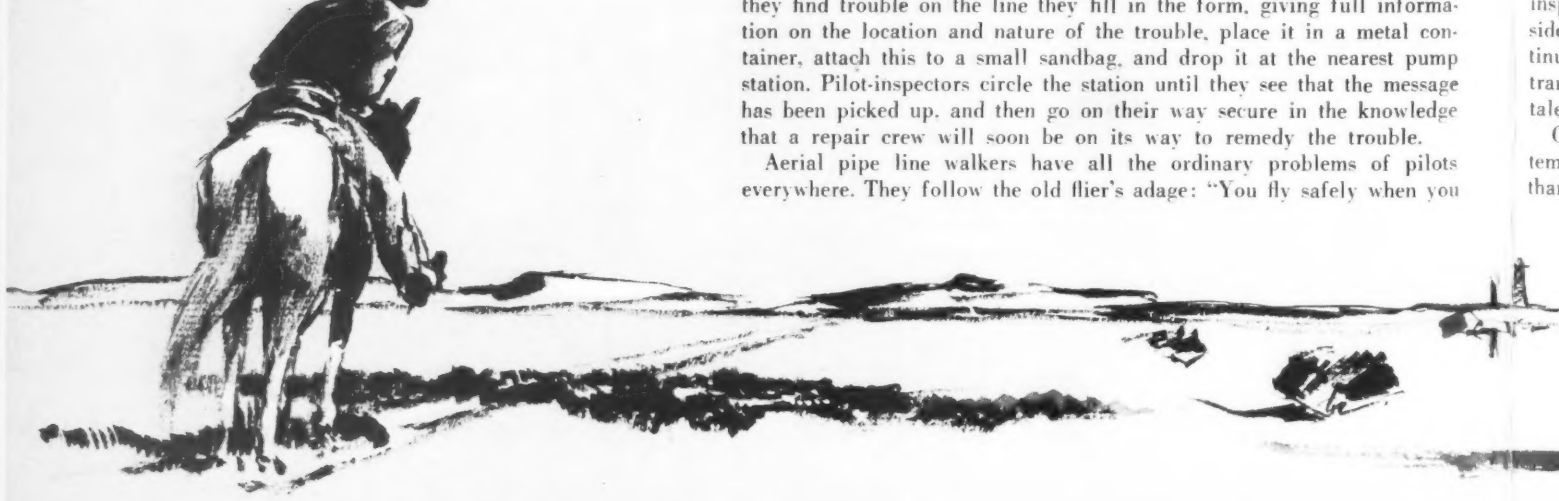
Rights-of-way are being cleared of all overgrowth or obstruction which might hamper the pilot-inspectors' views, and V-shaped indicators are being placed on all rights-of-way at five mile intervals and slanted at 30-degree angle off the vertical on two sides so that the pilots may see them from either direction.

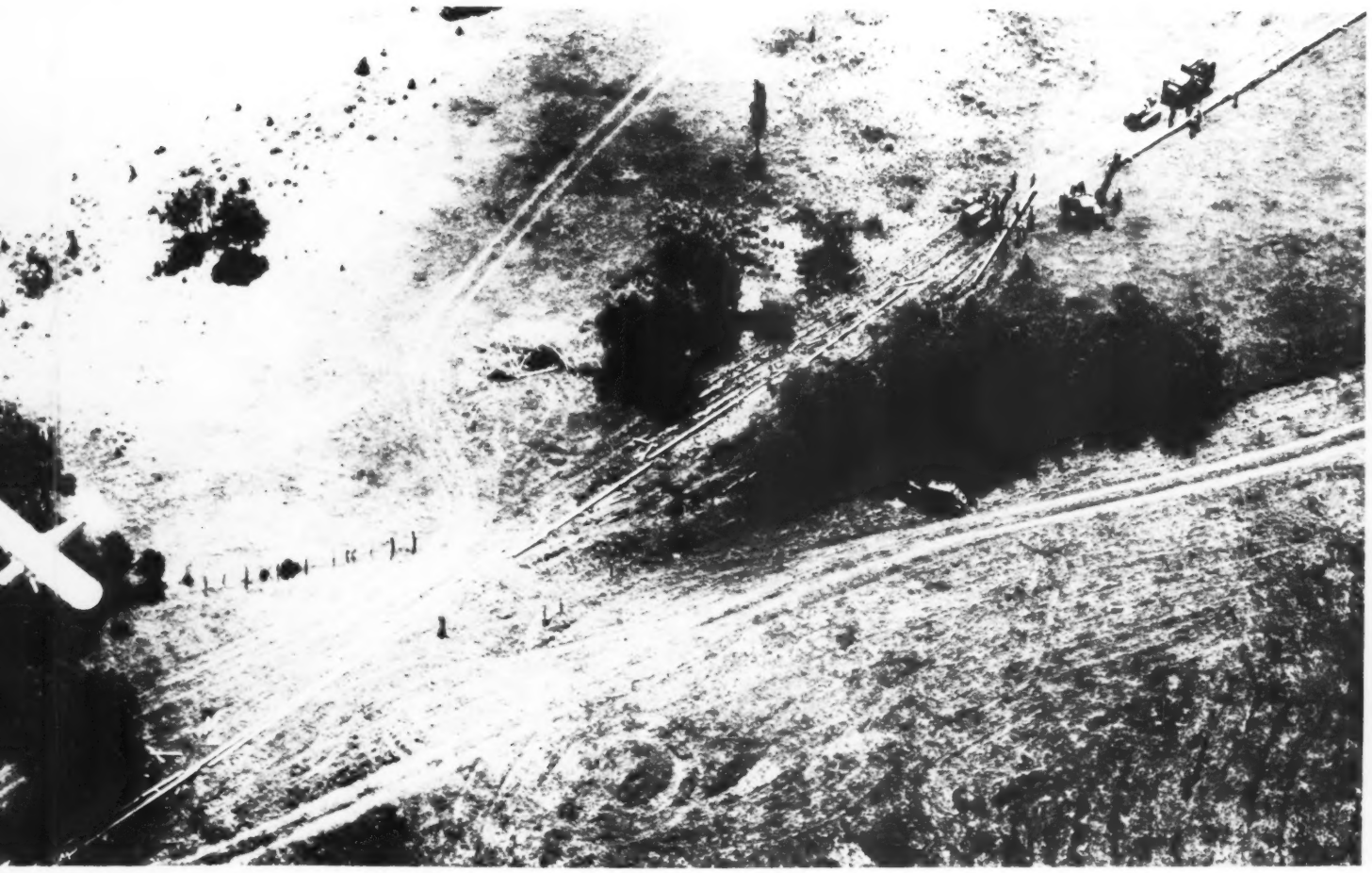
A PILOT-INSPECTOR FLIES OVER A SECTION OF LINE UNDER C

Plans are being made now to install two-way F-M radios in all of the patrol planes to facilitate communications with ground stations to be located at strategic points on the pipe line system. Three such ground stations have already been installed at Pettus, Harbor Island, and Ingleside stations. Until the radio system is completed, drop signals will continue in use.

Pilot-inspectors keep before them aerial patrol report forms. When they find trouble on the line they fill in the form, giving full information on the location and nature of the trouble, place it in a metal container, attach this to a small sandbag, and drop it at the nearest pump station. Pilot-inspectors circle the station until they see that the message has been picked up, and then go on their way secure in the knowledge that a repair crew will soon be on its way to remedy the trouble.

Aerial pipe line walkers have all the ordinary problems of pilots everywhere. They follow the old flier's adage: "You fly safely when you





E UNDER CONSTRUCTION AND ON TO HIS ROUTINE TASK OF CHECKING MAIN LINE RIGHT-OF-WAY.

fly like and when the birds do." Strangely enough, birds—common buzzards—are one of the major hazards facing the pilot-inspectors.

Weather reports are obtained both from the weather bureau and from Humble pipe line stations. Nevertheless, the aerial patrolmen often run into rough flying since they fly so near the ground that air currents are apt to buffet their small planes occasionally.

By introducing the use of planes on the Humble system, five pilot-inspectors are able to cover the mileage formerly checked by a considerably greater number of line walkers. While a few of the latter continue to inspect gathering system lines, the majority of them have been transferred to other positions comparable in pay and suited to their talents.

On the basis of experience to date, aerial patrol of the pipe line system has proved far more satisfactory and considerably more economical than the old system of walking or riding.

Keeping Pace with INDUSTRY

Petroleum Technologists Meet the Needs of Texas Industry for New, Versatile Industrial Lubricants

A YEAR ago, the thundering roar of war-geared Texas industry was diminishing into a low rumble. Today, the roar is returning as the hum of Texas factories, converted to peacetime production, swells and deepens.

In the last two decades, many new industries have come to Texas, and during the war years new plants seemed to mushroom overnight, posing many problems for the basic industries of the state. The output of electrical power was increased to provide more kilowatts for the busy machinery; the transportation industry—rail, water, highway and air—operated at top speed bringing in the raw materials and hurrying away the finished products; the lumber industry provided millions of board feet of Texas timber for the war spurred expansion; agriculture, mining, building, all were called on for added effort, extra speed.

The oil business, number one industry of the state, accelerated its operations to meet the growing demands. The production of oil surged upwards; the natural gas distribution systems were expanded to deliver fuel to the new war plants; pipe lines speeded crude oil to the bustling refineries for conversion into urgently needed products. And technologists of the oil industry labored not only to bring forth more powerful fuels, more deadly explosives, more effective synthetics, but also to make the products which would keep the wheels of Texas industry turning at top speed—specialized, complicated, *new* industrial lubricants.

The great aircraft plants brought to Texas almost as many machine tools as had been previously in the whole state. Many were new high-speed tools which required specialized attention and up-to-the-minute lubrication; tools which machined new metals and made necessary new cutting fluids, revolutionary in action.

Down on the Gulf Coast the surging ship building industry had its special problems. Heavy duty lubricants were required for the huge gantry cranes, light and tough oils for pneumatic tools, even launching lubricants to assure the safe passage of the finished hulls from land to water.

The steel industry came to Texas with its roaring blast furnaces bringing lubrication problems of extreme stresses and high operating temperatures. Oil technologists were ready with special high temperature greases, tough, durable, industrial oils, and quenching and core oils for the foundries which processed the output of the steel mills into finished products.

The state became the source for a good portion of the nation's total production of synthetic rubber and again new and different problems of lubrication were posed. Operating temperatures in rubber plants plumbed the sub-zero levels; powerful solvents attacked lubricating films. Yet the products to do the job were made available by lubrication specialists.

At Texas City, on Galveston Bay, the only tin smelter in the western hemisphere was erected, and here, too, specialized problems of lubrication challenged the ability of lubrication engineers. But when the chemical industry began to erect its complex plants in Texas, it appeared that the very ultimate in unusual operating conditions had been reached. From the inexhaustible waters of the sea, from the mountains of yellow sulphur, from ages-old reservoirs of oil and gas, came new light metals, acids, solvents, plastics, and staggering problems of lubricating the machinery by which these marvelous transformations were made possible. For each of these operating conditions came special petroleum products to meet the specific requirements. And in the solution of those problems, petroleum technologists learned new lessons in versatility, ingenuity, and adaptability that are standing them in good stead today.

Post-war industrial Texas, while still studded with gigantic plants, is basically composed of many smaller factories where textiles, metals, foods, aircraft, chemicals, and household appliances are processed or manufactured. To each of these specialized and highly important industries the lubrication engineer brings expereince gained in the solution of wartime problems, products tempered in the crucible of war, valuable knowledge and practical understanding. For the industries yet to come the petroleum technologists hold forth the promise of prompt solutions to new operating problems, new products as they are required, constant improvement for better results. As Texas industry surges ahead, the men of petroleum: technologists, refiners, producers, and engineers will match step for step—keeping pace.

IN SOLVING THE LUBRICATION problems posed by the giant chemical plants which were erected in Texas during recent years, petroleum experts learned many valuable lessons now being applied to post-war industries.

Personnel CHANGES

SIGNIFICANT executive personnel changes in the Exploration, Production, Crude Oil, and Industrial Relations departments of the Company were announced by President H. C. Wiess on July 31.

"Because of the expansion of the Company's activities and in order to spread the supervisory responsibilities, the Board of Directors has created several new and important positions and has broadened the responsibilities of others," the announcement said.

All appointments were from within the Company and all became effective on August 1.

What was formerly known as the Geologic, Lease and Scouting department was changed to the Exploration department. The duties and responsibilities of Morgan J. Davis, chief geologist, were broadened and expanded to include management of the newly designated department. Mr. Davis began his career in geologic work with Humble in 1925. In 1929 he became associated with Nederlandsche Koloniale Petroleum Mij. in the Dutch East Indies, but returned to Humble as district geologist in New Mexico in 1934. Two years later he became assistant division geologist of the Gulf Coast division, and in 1941 he was appointed chief geologist.

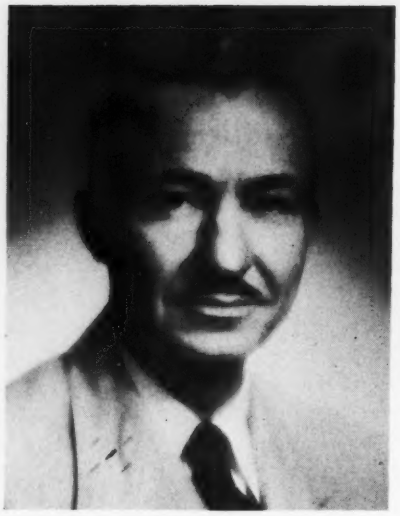
To assist Mr. Morgan in making the broadened program effective, J. Ben Carsey, Louisiana-Mississippi division geologist, and E. J. Hamner, assistant Southwest Texas division geologist, were appointed assistant chief geologists. Mr. Carsey will be in charge of exploration, and Mr. Hamner of production geology and geological problems relating to development, the announcement said.

All of this work will continue to be under the general direction of Vice President L. T. Barrow.

C. E. Reistle, Jr., was appointed manager of the Production department, and will be active head of all production operations under Vice President David Frame. Mr. Reistle came with the Humble Company as assistant chief petroleum engineer in 1936, was named chief petroleum engineer in 1940, and general superintendent of the Production department in 1944. R. C. Barbour, former superintendent of the East Texas division, was made general superintendent of the Production department, succeeding Mr. Reistle.

Still another change in the Production department was the establishment of the new position of assistant superintendent of the natural gas division and the appointment to the position of R. J. Schilthuis, former Southwest Texas division petroleum engineer.

Broadening of executive responsibilities in the Industrial Relations department was accomplished with the appointment of Ray H. Horton to the position of manager of the department and the naming of H. S. Warner and K. R. Dailey to the newly created positions of assistant managers. All work in the department continues under the general direction of D. B. Harris, director in charge.



MORGAN J. DAVIS

Mr. Horton came with the Humble Company as a roughneck in the Production department in 1930. He became a rotary driller in 1933, a safety engineer in 1934, regional industrial relations manager in the East Texas division in 1935, and head of Production department industrial relations in Houston in 1944.

D. F. Haynes, who was named manager of the Crude Oil department, began his career with Humble Oil & Refining Company as secretary to Vice President W. W. Fondren in 1918. A year later he became secretary to H. C. Wiess, then Vice President of the Company. Following about five years in secretarial capacities, be became in suc-

R. C. BARBOUR

H. S. WARNER

K. R. DAILEY

RAY H. HORTON

D. F. HAYNES

C. E. REISTLE, JR.

cession: cost and yield clerk in 1923; secretary of the manufacturing committee in 1934; and assistant manager of the Crude Oil department in 1940.

Other promotions and personnel changes as a part of the distribution of responsibilities to meet the expanded work and to fill vacancies resulting from the appointments mentioned were announced by Gay Carroll, Comptroller, as follows:

H. E. Potter, assistant East Texas division superintendent, assumed the duties of division superintendent.

Clyde M. Vardaman, district superintendent, Stratton district, was transferred to the Tyler office and assumed the duties of assistant division superintendent.

C. W. DeLancey, assistant Gulf Coast division superintendent, was named division superintendent.

R. E. Bridges, Gulf Coast division engineer, was named assistant superintendent.

T. J. Fuson, assistant Gulf Coast division petroleum engineer, was named division engineer.

Donald C. Glass, Houston petroleum engineering department, was transferred and named assistant Gulf Coast division petroleum engineer.

R. R. McCarty, Avery Island district superintendent, was transferred to Corpus Christi and named assistant Southwest Texas division superintendent.

J. I. Cochran, North Crowley district superintendent, was transferred to the Southwest Texas division as superintendent of the Stratton district.

Paul Turnbull, assistant Southwest Texas division petroleum engineer, was named division petroleum engineer.

R. C. Granberry, Houston petroleum enginerering department, was named assistant Southwest Texas division petroleum engineer.

P. H. O'Bannon, assistant Gulf Coast division geologist, was named Louisiana-Mississippi division geologist.

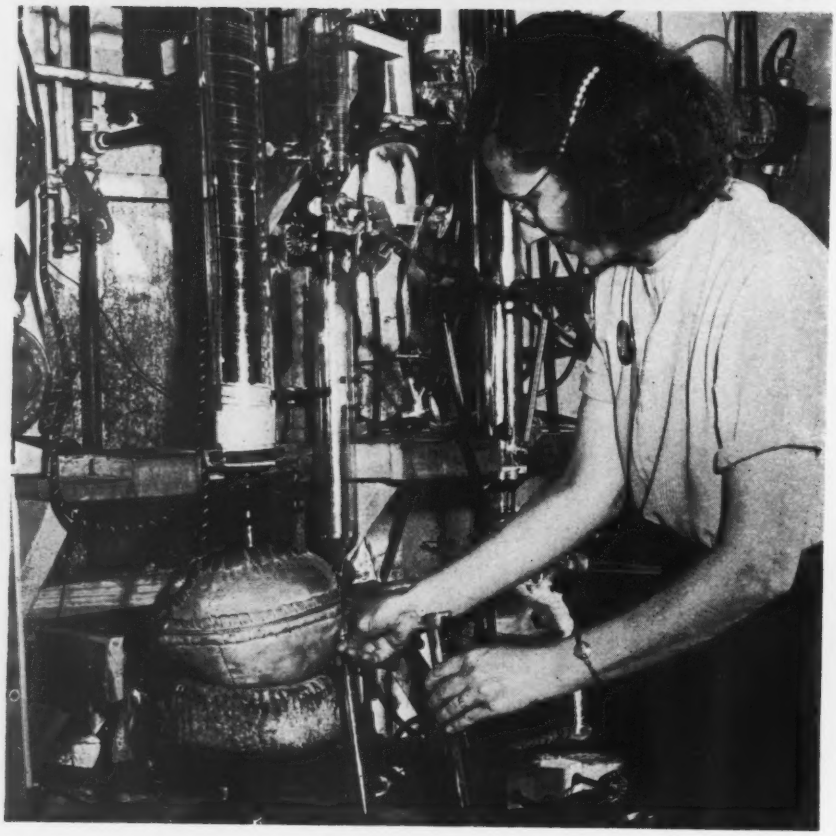
Dean Metts, assistant to the chief geologist in Houston, was named assistant Southwest Texas division geologist.

R. L. Denham, subsurface and special problems geologist in the Louisiana-Mississippi division, was named assistant Gulf Coast division geologist.

E. J. HAMNER

R. J. SCHILTUIS

J. BEN CARSEY



Proving

Crude Assay Laboratory at Baytown runs complete distillation tests on crude samples

NO ONE, not even a trained chemist, can look at a batch of crude oil and tell exactly what it is made of, for oils differ widely in physical and chemical composition. Like people, no two are exactly the same. Take samples from every producing well in the world, and you will find them as different as faces in a Main Street crowd.

For this reason, Baytown's Crude Assay Laboratory personnel must analyze samples of crude oil before it is bought, sold, refined, or transported through pipe lines. Although the laboratory is a part of the great Baytown refinery, its functions are Company-wide.

Among the important questions answered by this testing group are: How much does the oil weigh? How much contaminating material is present? What percent of the oil can be refined into naphthas? Gas oils? Kerosene? Lube blends? Bottoms? And what are the qualities of all these products?

In the discharge of its regular duties, the Crude Assay Laboratory serves multiple purposes. For one thing, its findings are the basis for placing a money value on the crude. Another purpose of the assay is to determine the fitness of a particular crude for refining into finished products. Besides — and this is important — data from assays prevent mixing of dissimilar crudes in transit.

How does the Crude Assay Laboratory go about its tasks?

When new wells are brought in, or when oil is offered for sale to the Company, small samples—usually about 15 gallons—are sent to Baytown for a com-

SMALL DISTILLATION UNITS at the Crude Assay Laboratory, like their big brothers, the pipe stills and shell stills in the refinery, require close temperature control. Fenske columns (below) aid in refinery research problems by taking samples from pilot units and separating these samples into components.

Ground

plete distillation run. These tests are single batch operations, in contrast to continuous field operations in the refinery. The laboratory itself is a miniature, or vest-pocket edition, of the towering field units, but refining techniques are almost identical.

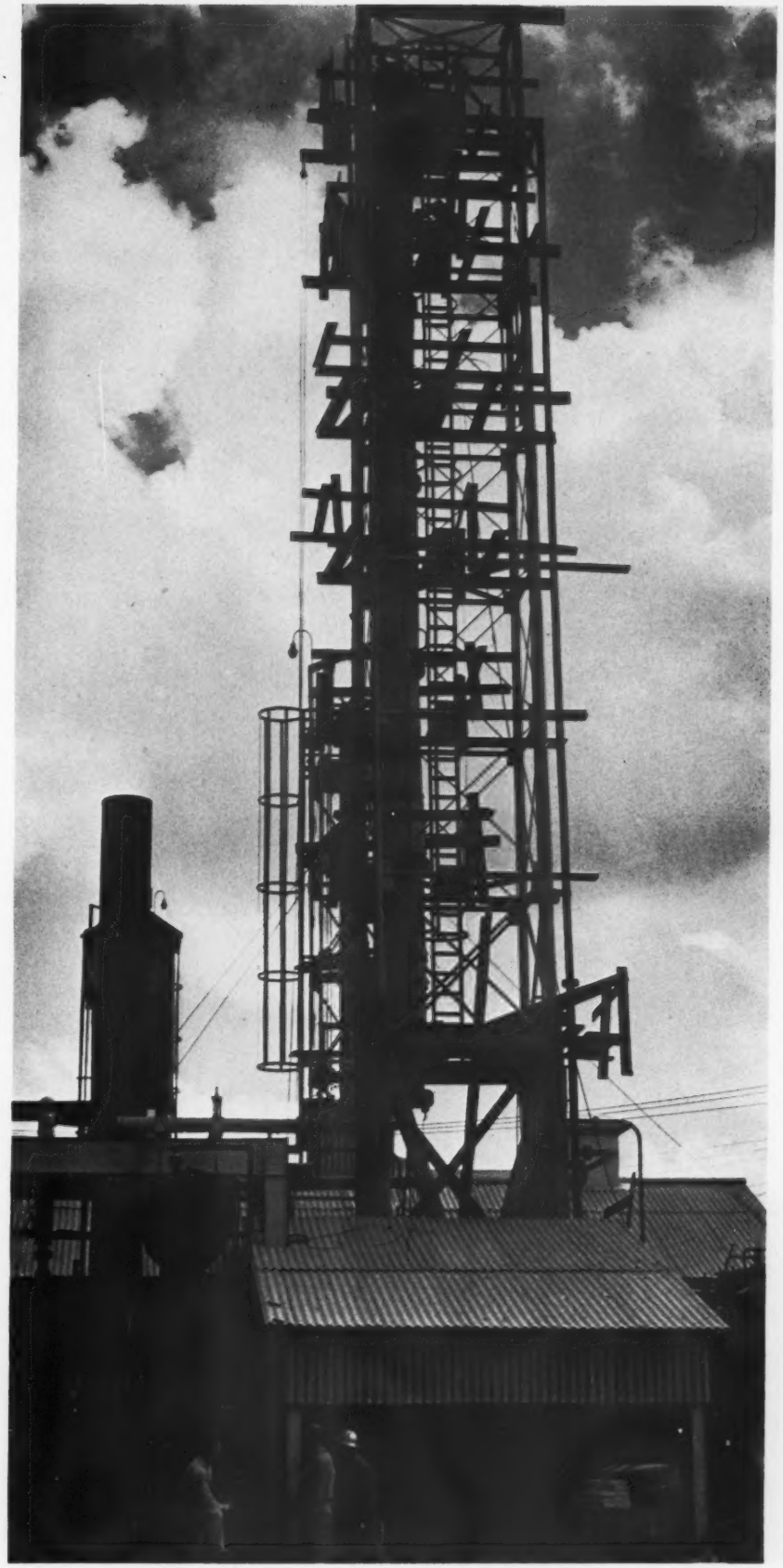
Heated in a small furnace, crude oil is vaporized and separated into such components as naphthas, kerosene, gas oil, lubricating blends, and bottoms. From the relative amounts of products obtained, data can be correlated, and predictions as to results from large scale operations can be made with startling accuracy.

When the distillation run is complete, each product is drawn off and sorted out for quality tests. Naphthas are sent to the Knock Testing Laboratory for octane ratings. Kerosene is tested for sulphur content and smoke point. Gas oil —principal feed stock of the great catalytic cracking units—is analyzed for flash point, viscosity index, and sulphur content. Heavy bottoms are probed for their suitability in the manufacture of lubricating oil, fuel oil, and asphalt.

When all data are complete, results are telephoned to a price and disposition committee in the Houston Office.

The laboratory is concerned with other duties besides assaying crude oil. In keeping with Humble's policy of continuous improvement of product quality, regular evaluations are made of plant stocks sent in by research groups. These samples are tested for yield and quality of components. Data resulting from such tests are of considerable value to those in charge of operations at pilot research units.

Two new distillation units, with a capacity of 20 barrels each, were completed in July. By increasing its scope in assisting with research problems, these units have made the Crude Assay Laboratory even more useful in the search for better and better products.



LABORATORY FOREMAN and shift supervisor discuss construction progress on two 20-barrel distillation units. One is designed to operate on light charge stocks; the other uses heavier oils. Both have been completed and have taken their places with the Crude Assay Laboratory family of testing units.

The Search for OIL

By D. C. FRANSEN
Chief Scout

Second in a series of articles on exploration which points out the functions and methods of the scout

ABOUT two decades after Colonel Drake entered the history books with his famous discovery of oil at Titusville, Pennsylvania, in 1859, the profession of oil scouting began.

It was all the direct outgrowth of a practice originated in 1878 by pipe line companies issuing certificates to producers for oil received into lines from producers' wells. These certificates, or run tickets as they are now called, represented one thousand barrels of oil; they were negotiable and were accepted as collateral on loans by the banks. Immediately exchanges sprang up at Bradford and Oil City, Pennsylvania, to trade in these certificates, whose face value fluctuated with the price paid for oil on the floor of the exchanges. The market in those jubilant boom years was not only extremely sensitive; it was positively skittish. The use of oil was limited, its transportation was difficult, and the slightest rumor of a new discovery or failure would, in turn, kick prices into the cellar or send them soaring through the roof. With no one to investigate the truth or falsity of the reports, canny manipulators were free to resort to fictitious reports to turn the market to their advantage.

The use of questionable rumors and false reports resulted in a snarl of affairs on the exchange floors. It was then that someone conceived the idea of sending a man to wildcat wells to gather the true facts and to telegraph his findings in code. From that idea was born a picturesque figure, the oil scout.

As might be expected, the lot of this pioneer scout was no bed of roses. The operators were fully aware of the speculative harvest that could be reaped on the exchanges by using the information solely for their own benefit. As a consequence, armed guards surrounded well locations and every precaution was taken to prevent any leaks of what the drilling operations had disclosed. But they were more than countered by this new emissary, who was resolute and resourceful in overcoming obstacles.

These were wild, gaudy days, crammed with all the exuberance and feverish excitement of a booming new industry and the oil scout fitted into this colorful picture. Riding fast saddle horses, with saddlebags bulging with all manner of special equipment, such as field glasses, an aneroid, a tape line, and maps, the oil scout reconnoitered wildcat wells.

The field glasses probed the hidden view; the aneroid furnished the elevation necessary to determine the depth of the expected sand; the tape line was used in making hourly well gauges; the maps informed him not only of the location of the well, but gave him an idea of the terrain. Frequent observation of oil sands made him expert in distinguishing formations. It can be seen that from the use of the aneroid for well elevations and certain simple topographical mapping (especially with reference to creeks, sometimes facetiously referred to as "Creekology"), and the ability to distinguish sands, the scout took a large part in what today is a vital phase of the oil industry. The present highly developed art of oil field mapping and the science of petroleum geology owe something to the earnest, and sometimes crude, efforts of the oil scout of the 1880's.

UNLIKE EARLY SCOUTS, today's field intelligence men visit with drillers on the derrick floor and obtain a substantial amount of the necessary and desired information on a friendly and business-like basis.

SCOUTS FROM SEVERAL COMPANIES SPREAD THEIR MAPS IN THE SHADOW OF THE WILDCAT DERRICK AND COMPARE NOTES

What may be termed as the second era of the oil scout has to do with that period between the collapse of the exchanges and the advent of the scientific quest for oil a few years after the turn of the twentieth century. He was now more occupied during this interim in trying to further the interests of the legitimate oil producer, pipe liner, or refiner. His mode of transportation was still the horse and buggy, but some improvements in technique were shown in these early days of oil finding. In addition to studying topography, the scout began to recognize the value of other physical omens, such as oil and gas seeps, sulphur water, and paraffin dirt. His main duties consisted of obtaining information on wells with reference to sands, casing seats, and drilling conditions, and doing such lease and land work as the immediate exigencies required.

The modern period coincides with the establishment of geological departments of which, in most organizations, the scout became a part. The transition was gradual over a period of years, and as geologists by virtue of expanding knowledge crossed new frontiers, so have the duties of the scout become more complex.

These increased demands have naturally been accompanied by some proportionate hardships on the scout and even though working conditions are more pleasant, his job is still very complex and not at all an easy one. He has profited by the relief from some of his early handicaps and now enjoys the mental satisfaction of being able to render a broader and more accurate service to his employer. The main contributing factors to this better state of working conditions may be summarized as follows:

Good roads and better automobiles and tires; quick accessibility in most cases of good hotels and cafes; improved and more universal modes of communication; and public records, which include those of State regulatory bodies and

county lease records. All have proved to be a great help. The present day deeper and more complicated drilling, requiring additional employees and outside specialists, leading to a diffusion of knowledge and increasingly common interrelated activities through partnerships, donations, farm-outs, and purchase of spreads of acreage, have helped to widen the avenues of information. In addition there is an interdependence for information among practically all members of the oil fraternity, which places matters on a reciprocal basis; there are scout checks, or weekly meeting places, where representatives of all leading operators exchange their own and other information with certain exceptions; and there is a most cooperative and helpful attitude within his department and in other company departments.

This brings us to the question as to what are the duties of the scout. Of course, there are geological scouts, pipe line scouts, geophysical scouts, and other types serving their particular branches of the business, but for our purpose, we will consider the oil scout as used by most companies. Let us briefly list his duties in their chief divisions:

Drilling Wells: All pertinent information, from a surveyed surface location to the bottom-hole location, that can be obtained, with special emphasis on wildcats and those wells in which his company has an interest or wells which lie proximate to the company leases. Also all possible drillers' and electric logs, gamma rays logs, and information samples must be secured.

Geophysical Activities: Scout reports in this field show the principal, the contracting agent if any, the party chief, the method used such as reflection, refraction, or gravitymeter, and the locality in which the survey was made. As in the case of drilling activities, the reports which follow an approved uniform manner, are furnished weekly.

Leasing Activities: These trades are secured from the records of each county or parish and from more direct and quicker sources. Of primary consideration is the need to be aware of the formation of important blocks or plays in their incipiency, so as to permit sufficient time for appraisal and participation. The leases are placed by the scout on his map and a general report is made in a weekly letter. This letter also contains materials divorced from leasing, affecting all phases of the business that is deemed noteworthy.

TOOL HOUSE CONFERENCES are informal but highly productive. When the driller and members of his crew are off duty they talk shop with scouts, who gather information about progress of the well and other data which are likely to be of considerable value to their companies.

CHECKING SAMPLES by smell, taste, and feel, and obtaining a full set of samples is highly important, especially on wildcat wells.

Telephone calls, telegrams, notegrams, and special letters as the matters warrant, supplement the routine methods of reporting.

Some of the scout's time is consumed in checking particular areas to ascertain lease conditions and in investigating any special matters that need attention.

What are the personal qualifications which fit a man for the scouting profession? No amount of formal education or training would be sufficient in a profession which calls for at least some knowledge of all phases of an intricate industry and requires day-to-day application of knowledge in geology, engineering, physics, psychology, field and clerical experience, and an understanding of other technical and practical matters. One does not have to be possessed of any combination of these qualifications to any high degree, but it is desirable for a scout to have a formal educational background in geology or engineering plus a good working knowledge of other phases of the work. The practical approach to this vocation demands a reasonable knowledge along certain of these lines, common sense, and in lieu of experience, a diligent preoccupation with the subject to hasten the point where an understanding and an intelligent grasp can be had and communicated.

A high degree of loyalty is a tradition. In this particular vocation, the opportunity for indolence is probably greater than in many other professions. Therefore, loyalty and constant striving for efficiency are essential for success.

Naturally it is an established fact that the effectiveness of a scout is still to some extent determined by his personality. Truly, the modern scheme of things, such as scout checks, the availability of information from other standardized sources, and the general tendency toward a leveling of the human equation, has understandably caused this vital element to be overlooked. The old idea of salesmanship and tact—in short the ability to make friends and inspire confidence—provides the key to unlock hidden stores of information. Further extended, through his innumerable contacts over wide areas, including those untouched by development, the scout becomes an extraordinary ambassador of good will.

There is something about the oil industry that makes it fascinating and a realization of this aspect of the business thoroughly pervades the profession of scouting. One has yet to meet a real ex-scout, regardless of his later pursuits in life, who does not harken back with a fond nostalgia to the days when the by-word was: "How Deep Are You?"

TO INSURE laboratory usefulness of samples, scouts check for proper labeling, correct depth figures, completeness of set.

LUNCHEON CONFERENCES are popular with scouts. Much good natured banter is indulged in, but basic information on drilling wells, geophysical and leasing activity in specific areas is exchanged openly on a reciprocal basis. Routine information is reported in weekly letters.

SURVEY PARTIES OFTEN GO OUT BY BOAT TO LAY OUT THE LOCATION FOR A NEW WELL IN LOUISIANA MARSH COUNTRY

Location Crew

The process of drilling for oil is a tremendously complex one. Catalogued under those many jobs designated as important in that process is the work of the location crew. Once a potential oil deposit has been located, maps of the area, with property lines and section lines etched on them, go to the civil engineering department, thence on to the district in which the deposit is situated. Here the district head assigns the location work. A party chief, as he is called, is in charge, with anywhere from one to five associates. When the going gets rough, as it generally does in the Louisiana swamp regions, a brush gang is attached to the party. Armed with machetes, axes, and hatchets, these men chop and hack away the underbrush so that accurate surveying can be accomplished.

Two-fold is the location crew's work: to survey the location in accordance with lease arrangements and as outlined in the deed to the property, and to stake out the actual drilling site of the well. What may be a simple operation of surveying and staking in a majority of location jobs, becomes a difficult and agonizing problem in the marshes of Louisiana and in certain wild stretches of Texas where even walking takes on the aspects of a major task.

When the clearing has been hacked for a suitable surveying job, the location crew really gets to work. Down go the stakes, with bright yellow, easily visible cloth strips attached to them. These fluttering little flags are necessary if the stakes are to be found later. Not only is the actual drilling site accurately determined, but roads or canals to the proposed well and mud pits are surveyed and made ready for the construction gang to move in.

The men of the location crew are inveterate commuters. Often, in the marshes of Louisiana or wide expanses of West Texas, their headquarters is the district production office while the location they are staking is many miles away.

But wherever they are, the task of the location crewmen remains the same: to pinpoint by precision surveying the exact spot where a well is to be drilled.

BRUSH GANG, equipped with big machetes, axes, and hatchets, chops out a clear path through the swamp for the surveying party.

KNOWING HOW to distribute body weight and use the surveying rod enables the head chainman literally to crawl over hyacinth choked bayou.

INSTRUMENTS UP HIGH, members of the location crew often move through water from knee to waist deep. Party chief (below) passes out bright yellow, easily visible location markers to head and rear chainmen.

MEANDERING RIVER BOTTOM is the term for determining the exact course of a stream (above). Survey work is difficult in the unsteady swamp. Slight movement of people walking affects accuracy of instrument.

By the way . .

Appointed to NPC

PRESIDENT H. C. WIESS was named recently to serve on the 85-member National Petroleum Council, the advisory group organized at the suggestion of President Truman for the U. S. Department of the Interior's new Oil and Gas Division. Patterned after the wartime Petroleum Industry War Council, the National Petroleum Council will represent all branches of the oil industry.

Accepts Post With Standard

GEORGE B. CORLESS, Gulf Coast division superintendent in the Production department for the past 15 years, resigned from the Company late in July to accept the position as coordinator of the executive development program with Standard Oil Company (NJ) in New York. Mr. Corless came to the Humble Companies in 1927 to assist in the construction of the Ingleside-McCamey pipe line, but transferred into the Production department in the following year. He served as civil engineer and petroleum engineer before becoming division superintendent in 1931.

Changes and Transfers

ALVIN B. VANHOOSER, Government Wells district superintendent, was recently appointed Imogene district superintendent, and F. C. HORNER, Colorado district superintendent, was transferred to replace him in the Government Wells district. DONNEL O. HARVEY, Flour Bluff district farm boss, was named Colorado district superintendent. Down in Louisiana, E. E. WILLIAMS, Potash district superintendent, Point-a-la-Hache, Louisiana, was transferred to North Crowley as district superintendent. J. B. PAYNE, Bayou Sale district superintendent, was transferred to the Avery Island district in the same capacity, and E. M. BEDFORD, Potash district chief clerk, was transferred to Avery Island as district chief clerk.

Retirements

JAMES B. SPURLOCK, 65, tool room employee at Baytown refinery, retired on February 16 . . . TOM J. DARRAH, 55, claim agent in the Geophysics department, on June 1 . . . BYRON R. GOSSETT, 61, assistant district superintendent, Friendswood, on June 1 . . . ALFRED F. RUEBSAHM, 65, research chemist at Baytown, on June 3 . . . JOHN WINKLER, 61, pumper-gauger at Gladewater, on June 11 . . . EUGENE D. REESE, 56, rigger foreman at Baytown, on June 17 . . . HOLLY O. CLARK, 65, engineer at Truscott Station, HPL, on July 4 . . . PAUL A. MARSH, 53, shift engineer at Ingleside refinery, on May 22 . . . LUTHER C. FOSTER, 57, division inspector at Cisco, HPL, on June 30 . . . LAWRENCE H. WEST, 64, storehouse clerk at Baytown, on July 9 . . . and WILLIAM E. DYKES, 48, boilermaker at Baytown, on July 21.

Deaths

FRANK M. WELLS, 51, engineer at Navasota Station, HPL, died on June 4 . . . J. V. SNOW, 31, helper in the instrument department at Baytown, on June 4 . . . REGINA HINSON FULKERSON, 26, laboratory helper apprentice at Baytown, on June 15 . . . LOU ALICE WAYCOTT, 18, junior clerk in the purchasing department, Houston, on June 24 . . . NOAH E. CORNELL, 51, assistant district gauger at Hull, HPL, on June 27 . . . TOLBERT G. FULLER, 49, valve repairman at Baytown, on June 28 . . . JAMES I. TUTTLE, 53, district superintendent, Scott-Hopper Production, on June 29 . . . MRS. NONA METCALF PERRY, 21, stenographer in Houston, on July 7 . . . ARTHUR L. COOK, 21, pumper-gauger at Odessa, on July 27 . . . and THOMAS V. PULLEN, 64, blacksmith at Baytown, on July 30.

Annuitants who have died since last publication date are: PAUL HARBOUR, 77, formerly stock gauger at Baytown, retired since August 20, 1937, died on May 16 . . . WILLIAM H. GROCE, 47, pumper-gauger at London, retired since December 22, 1944, died on June 2 . . . WILLIAM EMIG, insulator at Baytown, retired since October 4, 1945, on July 9.

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P. O. BOX 2180, HOUSTON 1, TEXAS

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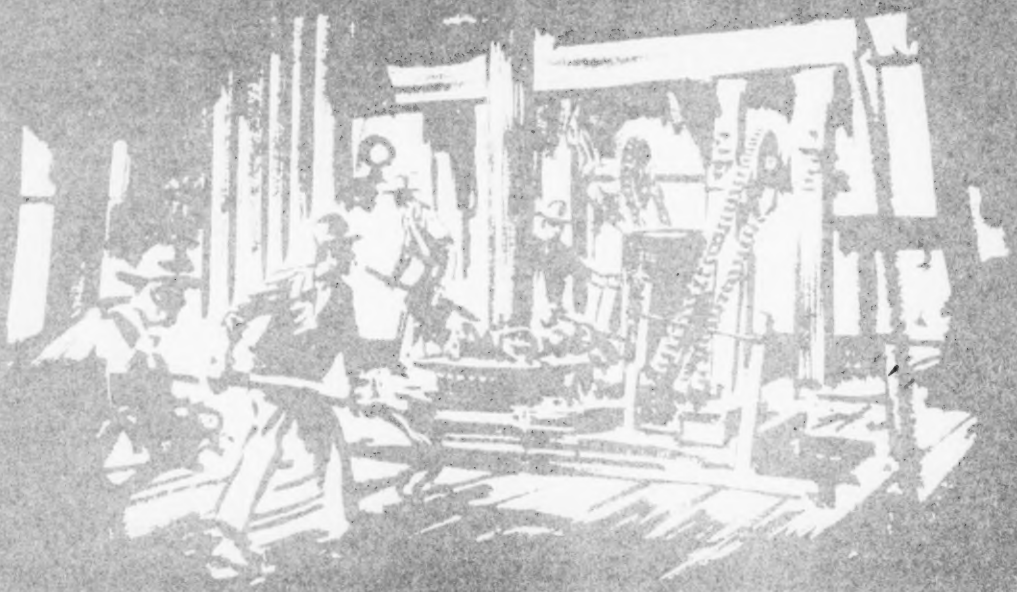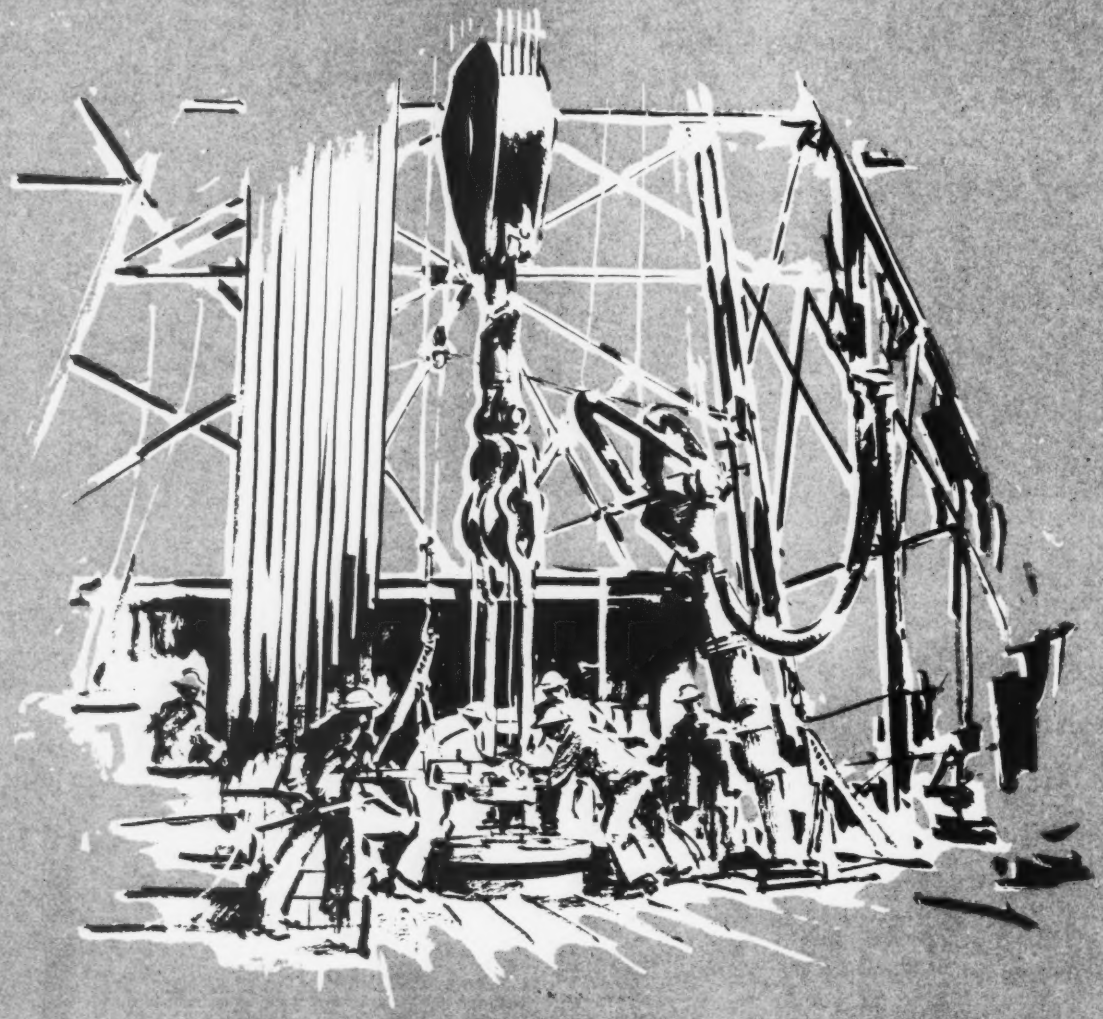
STUMP PLANTS, which manufacture turpentine and other pine by-products from old stumps, are among some of Mississippi's new industrial enterprises.